

ENVIROTRAK® V-STX CONTROLLER

ENV-V-STX



GENERAL DESCRIPTION

The Envirotrak™ V-STX is a high-performance, BACnet native direct digital controller (DDC). It provides speed, power, memory, and I/O flexibility in a compact package. The ENV-V-STX is targeted for fume hood, laboratory air flow, isolation and containment room control applications with small I/O point counts. Made with integration in mind, the ENV-V-STX can integrate with building automation systems via BACnet (IP or MSTP) or Modbus (IP or serial). The dual IP ports provide the ability to take advantage of a daisy-chain topology.

Key Features and Benefits

Performance / Hardware

- ◆ Built-in End of Network switch for easy configuration on a BAS network
- ◆ Flexible, color-coded and easy to wire I/O
- ◆ Program and historical data stored in non-volatile memory, eliminating the need for batteries

Communications Features:

- ◆ 3 Configurable Communication Ports
 - Eth0 & Eth1: Daisy Chain 10/100 Base T Ethernet Ports for BACnet or Modbus communication, includes DHCP addressing
 - Port S1: EIA-485 for BACnet or Modbus (BAS or 3rd-party device)
 - Port S2: EIA-485 for BACnet or Modbus (3rd-party device)
- ◆ 3 Dedicated Communication Ports
 - Service Port: USB-A for technician access or EQT2 touchscreen connection
 - Rnet: For the ZS communicating sensors or EQT2 touchscreen connection
 - USB Comm Expansion Edge Connector Port: for comm expansion

LCS Inc.



Air Flow Control Solutions
 Laboratory Control Systems Incorporated
 91 Quinton Road
 Scott Township, PA 18447
 Tel: 570.487.2490 Fax: 570.487.2494
 www.labcontrols.com

Title:
 ENVIROTRAK® V-STX CONTROLLER

Model Number:
 ENV-V-STX

Drawing Number:
 ENV-V-STX DS

Date:
 7/27/21

Rev.
 A

Service & Usability Features:

- ◆ Fully programmable using our powerful EIKON® graphical programming tool.
- ◆ Flexible site-specific archiving supported allowing for restore points to be created with a variety of ways to trigger the restore point and recover to that archive.
- ◆ Unique permissions framework provides protection for intellectual property (IP) while allowing for seamless connection of controllers to WebCTRL (Automated Logic) or i-Vu (Carrier) building automation systems.
- ◆ Existing control programs are easily converted and supported in the new hardware

Specifications:

Power	24 Vac / 24 Vdc ±10%, 50-60 Hz, 55 VA / 20 W, single Class 2 source only
Operating Range	-40° to 158° F (-40° to 70° C); 10 to 95% relative humidity, non-condensing
Universal Inputs (8) (Software selectable)	8 Universal Inputs electronically configurable to any of the following types: Dry Pulse Counting Thermistor 0-10 Vdc @ 20mA 24VDC auxiliary sensor power (2): 24Vdc @ 100mA total current capacity
Outputs (9)	1 Universal Output selectable to 0-10 Vdc (5 mA max), PWM, or Dry Contact Rated @24VAC 1Amp 2 Analog Outputs 10Vdc @ 20mA max (D/A Resolution 12 bits) 6 Digital Outputs (Dry Contact) Rated @24VAC 1 Amp. Configured normally open Status LED for all outputs
Communication Ports	Eth0 & Eth1: Dual 10/100 BaseT Ethernet ports with built-in fail safe, supporting direct connection or daisy chain topology natively using BACnet/IP BACnet Modbus Port S1: High-speed EIA-485 port with End of Net switch. Configurable through browser. • BACnet MS/TP or Modbus RTU network at 9.6, 19.2, 38.4, 57.6, 76.8, or 115.2 kbps (supports automatic baud-rate configuration) Port S2: Electrically isolated EIA-485 port. Software configurable and support for up to 50 third-party points • BACnet MS/TP or Modbus RTU network at 9.6, 19.2, 38.4, 57.6, 76.8, or 115.2 kbps USB Service port: USB-A port for technician use and local EQT displays. Also supports connection of USB Flash drive for device recovery and USB Wireless Service Adapter Rnet port: Communicate with ZS communicating sensors and local EQT displays USB Expansion port: For communication expansion modules
Real Time Clock	Real-time clock keeps track of time in the event of a power failure for up to 3 days
Protection	Fast acting, 3A, 250VAC, 5mm x 20mm glass fuse to protect controller power input
Microprocessor / Memory	32-bit ARM Cortex-A8, 600MHz, processor with multi-level cache memory / 16 GBs eMMC Flash memory and 256 MB DDR3 DRAM
Compliance/Listing	Conforms to the BACnet Advanced Application Controller (B-AAC) Standard Device, as defined in BACnet 135-2001 2012 Annex L and tested to Protocol Revision 14 United States of America: FCC compliant to Title CFR47, Chapter 1, Subchapter A, Part 15, Subpart B, Class A; UL Listed to UL 916, PAZX, Energy Management Equipment Canada: Industry Canada Compliant, ICES-003, Class A cUL Listed UL 916, PAZX&, Energy Management Equipment Europe: Mark EN50491-5-2:2009; Low Voltage Directive: 2014/35/EU RoHS Compliant: 2011/65/EU Australia and New Zealand: C-Tick Mark, AS/NZS 61000-6-3
Physical	DIN rail or Screw mounting. Minimum panel depth: 2.75 in. (7 cm) Dimensions Overall: 7.785 in. (19.77 cm) x 4.89 in. (12.43 cm), Depth: 2.00 in. (5.09 cm), Weight: 1.6 lb. (0.82 kg) Screw Mounting: 6.45 in. (16.38.cm), 4.5 in. (11.43cm)

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